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TRANSMITTAL FORM		Filing Date	June 20	June 20, 2003	
		First Named Inventor	Nica	Nica	
(to be used for all correspondence after initial f	iling)	Art Unit	2171	2171	
		Examiner Name	Unassign	ned	
Total Number of Pages in This Submission	227	Attorney Docket Number	SYB/0089	.01	
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Fee Transmittal Form Fee Attached Amendment/Reply After Final		Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation		of Appeals Appeal Cor (Appeal Not	mmunication to Board and Interferences mmunication to Group Ice, Brief, Reply Brief) Information
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Sheet 1 of 2

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Application Number	10/600,932			
Filing Date	June 20, 2003			
First Named Inventor	Nica			
Group Art Unit	2171			
Examiner Name	Unassigned			
Attorney Docket Number	SYB/0089.01			

	T	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	Г
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		STEINEBRUNN, M. ET AL, Heuristic and Randomized Optimization for the Join Ordering Problem, VLDB Journal, Vol. 6: 191-208, 1997	
		VANCE, B. ET AL, Rapid Bushy Join-Order Optimization with Cartesian Products, Proceedings of ACM SIGMOD Conference of Management of Data, pp 35-46, June 1996	
**		CLUET, S. ET AL, On the Complexity of Generating Optimal Left-Deep Processing Trees with Cross Products, Proceedings of the Fifth International Conference on Database Theory, pp 54-67, January 1995	
	e	GALINDO-LEGARIA, C., Uniformly-Distributed Random Generation of Join Orders, Proceedings of the International Conference on Database Theory, pp. 280-293, January 1995	
		GALINDO-LEGARIA, C. ET AL, Fast, Randomized Join-order Selection - Why Use Transformations?, Proceedings of the International Conference on Very Large Data Bases, pp. 85-95, September 1994	
	Ŀ	SWAMI, A. ET AL, A Polynomial Time Algorithm for Optimizing Join Queries, Proceedings of the IEEE Conference of Data Engineering, pp 345-354, April 1993	
W. W.		ONO, K. ET AL, Measuring the Complexity of Join Enumeration in Query Optimization, Proceedings of the 16th International Conference on Very Large Data Bases, pp. 314-325, August 1990	
		IOANNIDIS, Y.E. ET AL, Randomized Algorithms for Optimizing Large Join Queries, Proceedings of ACM SIGMOD Conference of Management of Data, pp 312-321, April 1990	
	,	SWAMI, A., Optimization of Large Join Queries: Combining Heuristics and Combinatorial Techniques, Proceedings of ACM SIGMOD Conference of Management of Data, pp 367-376, May 1989	
		SWAMI, A. ET AL, Optimization of Large Join Queries, Proceedings of ACM SIGMOD Conference of Management of Data, pp 8-17, May 1988	
		IOANNIDIS, Y.E. ET AL, Query Optimization by Simulated Annealing, Proceedings of ACM SIGMOD Conference of Management of Data, pp 9-22, May 1987	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 2

Complet if Known			
Application Number	10/600,932		
Filing Date	June 20, 2003		
First Named Inventor	Nica		
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
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	KRISHNAMURTHY, R. ET AL, Optimization of Non-recursive Queries, Proceedings of the 12th International Conference on Very Large Data Bases, pp. 128-137, August 1986				
	IBARAKI, T. ET AL, On the Optimal Nesting Order for Computing N-Relational Joins, ACM Transaction on Database Systems, Vol 9: pp. 482-502, September 1984				
	SELINGER, P.G. ET AL, Access Path Selection in a Relational Database Management System, Proceedings of ACM SIGMOD Conference of Management of Data, pp 23-34, May 1979				
	WONG, E. ET AL, Decomposition - a Strategy for Query Processing, ACM Transaction on Database Systems, 1(3): pp 223-241, September 1976				
		Cite No.1 Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. KRISHNAMURTHY, R. ET AL, Optimization of Non-recursive Queries, Proceedings of the 12th International Conference on Very Large Data Bases, pp. 128-137, August 1986 IBARAKI, T. ET AL, On the Optimal Nesting Order for Computing N-Relational Joins, ACM Transaction on Database Systems, Vol 9: pp. 482-502, September 1984 SELINGER, P.G. ET AL, Access Path Selection in a Relational Database Management System, Proceedings of ACM SIGMOD Conference of Management of Data, pp 23-34, May 1979 WONG, E. ET AL, Decomposition - a Strategy for Query Processing, ACM Transaction			

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